

VZCZCXYZ0024  
RR RUEHWEB

DE RUEHSG #0575/01 1702043  
ZNR UUUUU ZZH  
R 192043Z JUN 09  
FM AMEMBASSY SANTIAGO  
TO RUEHC/SECSTATE WASHDC 5085  
INFO RUEHAC/AMEMBASSY ASUNCION 4036  
RUEHBO/AMEMBASSY BOGOTA 2454  
RUEHBR/AMEMBASSY BRASILIA 0968  
RUEHCV/AMEMBASSY CARACAS 2139  
RUEHPE/AMEMBASSY LIMA 6248  
RUEHMN/AMEMBASSY MONTEVIDEO 4454  
RUEHQT/AMEMBASSY QUITO 2448  
RUEAEP/EP/EP WASHDC  
RHEHNSC/NSC WASHDC

UNCLAS SANTIAGO 000575

SIPDIS

STATE FOR H, WHA/BSC, OES, INR/IAA

E.O. 12958: N/A

TAGS: [ENVR](#) [ETRD](#) [PGOV](#) [PREL](#) [OVIP](#) [CI](#)

SUBJECT: STAFFDEL MEACHAM - CLIMATE CHANGE, WATER, AND U.S.  
COOPERATION IN CHILE

REF: 08 SANTIAGO 1096

¶1. SUMMARY: Senior Senate Foreign Relations Committee Staff Member Carl Meacham on May 27-June 3 met with Chilean officials, NGOs, as well as academics to review the effects of climate change. He also conducted a site visit to the El Maule region, which has been impacted by climate change. All the consulted experts expressed concerns about the trend of declining rainfall, climate characteristics moving southward, and the impact of reduced water-availability. Regarding potential areas for U.S.-Chile cooperation, several experts recommended that the two countries explore exchanging information on water market issues, effective use of sub-soil ground water, promoting water storage, water bench-marking measures, national studies on the effects of climate change, and more efficient irrigation methods. END SUMMARY.

#### A Variety of Interlocutors

-----

¶2. During a packed program (May 27-June 3), Senior Foreign Relations Committee Professional Staff Member Carl Meacham discussed growing concerns about climate change in Chile and potential areas of U.S.-Chile cooperation. Meacham met with representatives from the Foreign Ministry, National Council for the Environment (CONAMA), General Directorate for Water (DGA), Ministry of Agriculture, the Agriculture Protection and Development Service (SAG), National Forestry Corporation (CONAF), NGO Chile Sustentable, the UN Economic Commission for Latin American and the Caribbean (ECLAC), Universidad de Chile, and the Ministry of Agriculture's Research Institute (INIA). In the visit to El Maule, Meacham's schedule included meetings with the El Maule Regional Council, the Maule River Vigilance Committee, the Catholic University of El Maule, as well as the regional offices of SAG, CONAMA, and INIA.

¶3. Meacham also connected with a variety of opinion-makers. The Ambassador hosted a lunch with political pundits. Meacham gave an exclusive interview to the El Mercurio newspaper. He also participated in a discussion at Instituto Libertad y Desarrollo (a local think-tank) about Chile's upcoming elections.

#### Climate Change Underway

-----

¶4. Chilean authorities told Meacham that climate change is already affecting the country, which is experiencing varying effects in different regions of the country. The head of the General Directorate of Water (DGA), Rodrigo Weisner, noted there is decreased rainfall in areas such as Santiago, which previously received considerably more rain. Temuco in the southern 9th region

experienced record high temperatures, notably 35 degrees centigrade during one entire summer month when the average high is only 24 degrees. All agreed that the climate north of Santiago is getting drier and less rainfall is falling south of the capital.

15. CONAF Deputy Executive Director, Luis Duchens, noted that forestry authorities are experiencing droughts not seen in the past 50 years. During the past year, for example, the number of forest fires had increased notably. The Ministry of Agriculture advisor on climate change, Andres Laroze, indicated that Vina del Mar's climate is becoming more like that of northern La Serena (a 5-hour car drive from Santiago and closer to the Atacama desert zone), with little or no rain. Several experts noted that rainfall has increasingly come from sudden downpours that turn into runoff, which feeds into the ocean instead of replenishing the sub-soil water supply as it has traditionally done.

16. INIA's Sergio Gonzalez expressed concern, as did others, about the impact of climate change on small farmers, many of whom grow wheat and corn. The operating cost to small farmers is likely to increase because of their steady demand for water. He noted farmers will need to become more efficient, producing the same amounts of product using less water. He noted that the mountain snow lines are receding, which affect water supplies after a winter season.

#### GOC Response to Reduce Gashouse Emissions

-----

17. Sara Larrain of Chile Sustentable (an NGO) served on the team that prepared the GOC's December 2008 Action Plan on Climate Change (reftel). She spoke at length about the government's plans to diversify its energy matrix, which she thought could have been more

ambitious. Larrain noted that the GOC relies heavily on fossil fuels, particularly since its failed attempt to diversify the country's energy sources with Argentine natural gas. The GOC projects that by 2010 non-conventional renewable energy will represent 5% of the country's total energy production. By 2024 that figure rises to 10%, a figure Larrain thought should be doubled.

18. Larrain emphasized that Chile could not continue on its current path generating disproportionate greenhouse gas emissions, producing four times the world average and twice the average in Latin America. She indicated that, unlike other countries, Chile has many natural resources to develop renewable energy. She highlighted Chile's steady supply of sunlight in the Atacama Desert, heavy winds along the coast, and several locations with geothermal activity, which after an initial capital investment could be economically feasible.

19. The experts consulted agreed that Chile needs to diversify its energy sources and diminish its use of highly-contaminating diesel and coal. There is increased focus on renewable energy, but its development will take many years, several commented.

#### Field Trip to El Maule

-----

10. Meacham traveled to Talca -- the capital of the El Maule (7th) region -- and its environs June 1-2 to see first-hand the impacts of climate change on one of Chile's top zones of agricultural production. El Maule is well-known for its fruits and wines, as well as for the local sense of humor (e.g., a famous local phrase proclaims Talca's place among famous cities of the world: "Talca, Paris, and London!"). During a meeting with El Maule's Regional Council and the Deputy Regional Governor, Meacham was told the area was an excellent location in which to survey the effects of climate change. This was because of recent changes in the water supply and weather conditions that were having a significant impact on the local economy.

11. The Director of the Maule River Vigilance Committee (Junta de Vigilancia del Rio Maule), Manuel Gonzalez, echoed the commentary of INIA's Sergio Gonzalez (para 7). He said that while measured rainfall had recently been at normal levels, there was much less snow in the Andes (the river's chief water source). This was contributing to a reduction in the region's water supplies that could seriously impact the entire region. The organization was

trying to change water usage habits in El Maule and develop a system of more efficient irrigation (e.g., building reservoirs).

¶12. At the Catholic University of El Maule, the Director of the School of Forestry, Carmen Bravo, noted climate change was impacting local forests as water supplies diminished, carbon exposure increased, and micro-climate changes produced shifts in insect populations. A representative from the School of Agriculture reported that local apples and cherries (a specialty of the El Maule region) were ripening faster in terms of color as result of climate change, but not in terms of taste or smell. All the Chilean participants in the meeting lamented the lack of any national studies on climate change. They reported that very little research existed comparing the effects of climate change in previous years and forecasting possible changes in Chile.

¶13. During the meetings with the regional offices of SAG, CONAMA, and INIA, officials reiterated the importance of tackling water issues in El Maule. SAG representatives were particularly vocal about the need to change irrigation practices so that local farmers could adapt to shifting climate conditions. During a visit to the rural town of Empedrado, Meacham attended a meeting in which local government officials were attempting to get local farmers to participate in a local reservoir plan. CONAMA noted El Maule had a poor understanding of its water usage as well as subterranean supplies. Local INIA representatives suggested a national organization in Chile dedicated to water issues.

#### Potential U.S.-Chile Cooperation

-----

¶14. The Executive Director of CONAMA, Alvaro Sapag, noted that Chile does a good job providing potable water to its residents, comparable to the numbers one could find in OECD countries. He said Chile would be a good candidate to share its experience with other countries that have not successfully

created a clean water supply and efficient distribution system.

¶15. Experts also highlighted Chile's need to better manage increasingly scarce water resources. The representatives from ECLAC expressed concerns about increasing political and social debate surrounding water usage and allocation, including between competing exports sectors such as the mining industry and irrigated agriculture.

¶16. Meacham received many suggestions for future U.S.-Chile cooperation. Most focused on water issues, which are impacted by climate change. Recommendations included:

-- Sharing information and promoting cooperation on water monitoring, including river levels, subterranean supplies, and water quality, as well as data recording technology.

-- Sharing information and promoting cooperation on water market transactions and ways to lower these costs (e.g., review efforts in New Mexico, Arizona, Colorado).

-- Cooperating on promoting new techniques to measure ground water and utilize this water efficiently in irrigation.

--Promoting water storage in affected regions (such as a system of reservoirs in El Maule to help counteract the impact of climate change).

--Cooperating in the research and creation of studies comparing and forecasting the effects of climate change in Chile's regions.

--Teacher and student exchanges between universities in Chile and the U.S. related to the study of climate change and its impacts (especially on agriculture and forestry).

¶17. This cable has been cleared by Carl Meacham.  
SIMONS